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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,969	10/29/2003	Hiroaki Ohkubo	NECF 20.702	7995
26304	7590	06/09/2004	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			FARAHANI, DANA	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/695,969

**Applicant(s)**

OHKUBO ET AL.

**Examiner**

Dana Farahani

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese patent 02037746 A, issued to Nobuhara.

The Japanese patent discloses in figure 1, a semiconductor integrated circuit, comprising a support substrate 2; a semiconductor layer 6 that is formed on the entire surface of the support substrate and has a lower resistivity than the resistivity of the support substrate; and first and second circuit sections 12 formed in the semiconductor layer in an electrically isolated state from each other.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2, 3, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent.

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The Japanese patent substantially discloses the claimed invention, as discussed above, except for expressly disclosing the resistivity of the support substrate is 20 or 50 times or more the resistivity of the semiconductor layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the relative resistivity of the substrate and the semiconductor layer, since it has been held that discovering an optimum value of a result effective variable involves routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

5. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese patent as applied to claim 1 above, and further in view of the Applicant's Admitted Prior Art (AAPA).

The Japanese patent substantially discloses the claimed invention, as discussed above, except for expressly disclosing in the abstract that an analog circuit and a digital circuit is formed on the first and second circuit sections.

AAPA discloses in figure 1 of the instant application that on a substrate 101 a digital circuit 102 and an analog circuit 103 is formed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make an analog and a digital circuit on the same substrate in the Japanese patent, since it is well known in the art that in some circuit applications both an analog and a digital circuit must be present on the same substrate in order for the circuitry to be usable in that application.

***Product-by-Process Limitations***

A comparison of the recited process with the prior art process does NOT serve to resolve the issue concerning patentability of the product. *In re Fessman*, 489 F2d 742, 180 USPQ 324 (CCPA 1974). Whether a product is patentable depends on whether it is known in the art or it is obvious, and is not governed by whether the process by which is made is patentable. *In re Klug*, 333 F2d 905, 142 USPQ 161 (CCPA 1964). In an ex parte case, product by process claims are not constructed as being limited to the product formed by the specific process recited. *In re Hirao et al.*, 535 F2d 67, 190 USPQ 15, see footnote 3 (CCPA 1976). Therefore, in claims 4 and 9, the semiconductor layer being formed by epitaxial growth is given no patentable weight.

***Conclusion***

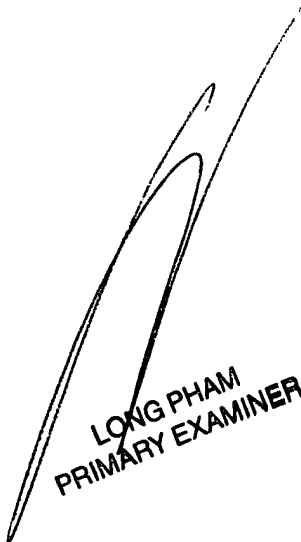
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (571)272-1706. The examiner can normally be reached on M-F 9:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M Fahmy can be reached on (571)272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Farahani



LONG PHAM  
PRIMARY EXAMINER